

ABSTRACT OF THE DISCLOSURE

There is provided a semiconductor device including  
a semiconductor substrate with a trench, and a  
particulate insulating layer filling at least a lower  
5 portion of the trench and containing insulating  
particles. The semiconductor device may further  
include a reflowable dielectric layer covering an upper  
surface of the particulate insulating layer, the  
insulating particles being stable at the melting point  
10 or the softening point of the reflowable dielectric  
layer.